

IN THE SPECIFICATION

Please insert the following on the top of page 1, before the title on line 1:

TITLE OF THE INVENTION

Please insert the following on page 1, before line 1:

BACKGROUND OF THE INVENTION

Field of the Invention

Please insert the following on page 1, before line 9:

Discussion of the Background

Please amend the paragraph beginning on page 1, at line 13 with the following rewritten paragraph:

It is known that an array of antennae can be used to form a beam and/or cancel interference in one or more directions. The antenna processing consists of a weighting of the outputs of the different antennae ~~but means of~~ with complex coefficients before summing, the coefficients being chosen so as to obtain the equivalent antenna diagram required. It is thus possible to form a beam in the direction of arrival of the useful signal whilst placing zeros in the directions of arrival of the interfering signals. The majoring of the beam formation techniques however require prior knowledge of the direction of arrival of the signal. Beam formation has been applied to mobile telephony, notably to direct a reception beam from a base station to a mobile station (uplink). The base station is then equipped with an adaptive antennae (referred to as an "intelligent antenna") capable of pointing in the direction of a propagation path issuing from a mobile terminal.

Please insert the following on page 2, before line 12:

BRIEF SUMMARY OF THE INVENTION

Please insert the following on page 4, before line 3:

LIST OF FIGURES

Please insert the following on page 4, before line 13:

DETAILED DESCRIPTION OF THE INVENTION

Please amend the paragraph beginning on page 8, line 16 with the following rewritten paragraph:

On the first antenna ( $\ell = 1$ ) taken as the reference antenna, the phase rotation does not depend on the direction of arrival:  $\xi_1 = \nu$ . It is therefore possible to provisionally choose  $\hat{\nu}$  equal to  $\xi_1$ . Equation (10) nevertheless has two distinct solutions on  $[-\pi; \pi]$ , which correspond to a maximum and minimum of the function  $D_\ell(\xi_\ell)$  and different by an angle  $\pi$ . These two estimated values are:

$$\hat{\xi}_1^0 \in \left[ -\frac{\pi}{2}; \frac{\pi}{2} \right] \text{ and } \hat{\xi}_1^1 = \hat{\xi}_1^0 + \pi.$$

Please amend the paragraph beginning at page 9, line 10 with the following rewritten paragraph:

According to equation (14) there must always be

$$\frac{\hat{\xi}_\ell^k}{\xi_\ell^k} \in \left[ -2\pi \frac{d}{\lambda} (\ell-1) + \nu; 2\pi \frac{d}{\lambda} (\ell-1) + \nu \right]$$

$$\underline{\hat{\xi}_\ell^k \in \left[ -2\pi \frac{d}{\lambda}(\ell-1) + \nu; 2\pi \frac{d}{\lambda}(\ell-1) + \nu \right]}. \quad (15)$$

Please amend the paragraph beginning at page 9, line 25 with the following rewritten paragraph:

It therefore remains to choose one minimum amongst the different minima obtained. The ambiguity removal procedure is illustrated in Fig 2. For  $(\ell = 2)$  and  $d/\lambda \leq 1/2$ , which is always the case in practice,  ~~$\hat{\xi}_2^k \in [-\pi + \nu; \pi + \nu]$~~   $\hat{\xi}_2^k \in [-\pi + \nu; \pi + \nu]$  and there therefore exists only one minimum  $\hat{\xi}_2$ .